

Amendments to the Specification:

Please replace the paragraph on page 1, lines 8-13, with:

The present patent application relates to methods for producing a thermoelectric layer structure on a substrate with at least one electrically ~~anisotropically~~ anisotropically conductive V-VI layer, in particular a (Bi, Sb)₂ (Te, Se)₃ layer and to components incorporating such a thermoelectric layer structure.

Please replace the paragraph on page 2, lines 24-26, with:

d) ~~Venkatasubramanian~~ Venkatasubramanian, R. et al., titled "Thin-film Thermoelectric Devices With High Room-Temperature ~~Fig.~~ Figures Of Merit", Nature, Vol. 43, 11. Oct. 2001, pp. 597-602.

Please replace the paragraph on page 3, lines 11-17, with:

What is disadvantageous in the case of the known solutions is that thermoelectric components currently cannot be grown in a ~~uniquely~~ an uniquely oriented manner (e.g. with the c-axis parallel to the substrate surface) on customary substrates using thin-film methods. It is an aim of the invention to uniquely set the known anisotropy of the V-VI materials in an advantageous manner for the construction of components.

Please replace the paragraph on page 7, lines 10-19, with:

In this case, for the crystallographic orientation of thermoelectric layers during growth in thin-film processes, preferably during sputtering, an additional electric field is applied to the substrate electrode during the sputtering operation. This results in preferred growth orientation in the direction of maximum electrical conductivity. This is important e.g. in the case of Bi_2Te_3 , $(\text{Bi,Sb})_2(\text{Te,Se})_3$ or V-VI-materials owing to its anisotropic thermoelectric properties. The growth orientation in the direction of the preferred a-axis becomes important as a result of the additional electric field.

Please replace the paragraph on page 10, lines 22-26, with:
Directed growth succeeds with an ~~electromechanical~~
electrochemical starting layer, which grows in the direction of highest conductivity (a-plane of Bi_2Te_3) perpendicular to specific substrates while complying with specific experimental conditions. This is known from the following publications by: